Author Index of Volume 195

Abell, J.S., 23, 39, 101
Abraham, R., 47
Adachi, S., 19
Adrian, H., 191, 299
Adriansens, W., 31
Allenspach, P., 595, 599
Amelinckx, S., 307
Aminov, B.A., 551
Amrein, T., 129
Andersen, J.V., 327
Andersen, N.H., 327
Andersson, A.M., 343
Andersson, B.M., 655
Anwand, W., 671
Aschermann, B., 559
Aschern, W., 283
Ashworth, S.P., 507
Assmann, H., 507
Assmann, W., 271
Assmus, W., 7

Baert, M., 191, 651
Balestrino, G., 727
Balkanski, M., 359
Bamas, P., 583
Barilo, S.N., 1
Baszyński, J., 683
Baudenbacher, F., 105, 215
Bauernfeind, L., 61
Beales, T.P., 507
Beamson, G., 535
Becker, W., 299
Bednorz, J.G., 519
Behner, H., 571
Belouet, C., 239, 243
Ben Salem, E., 335
Benayoun, S., 259
Benzar, I., 687
Berastegui, P., 363
Berberich, P., 215, 223, 271
Bernard, M.C., 239
Bernaschi, M., 631
Berthold, L., 109, 113
Bertin, P.-Y., 491
Bertrand, M.-A., 227
Beschoten, B., 375
Bieger, W., 65, 463
Blanc-Guilhon, B., 235
Blanchin, M.G., 125
Blank, D.H.A., 719
Blüm, S., 511
Bobo, J.C., 507
Boccara, A.C., 663
Boeke, E., 295
Bogner, G., 507
Boguslavskij, Yu.M., 643, 723
Bolmont, D., 459
Bontemps, N., 491, 663
Boon, W., 191, 651
Borck, J., 199
Bordet, P., 81
Börjesson, L., 327, 363
Bottiglione, A., 727
Bouffard, S., 411
Bourgault, D., 459
Boursier, D., 287
Brabers, V.A.M., 15, 439
Brakmann, M., 435
Braun, H.F., 61, 419
Brecht, E., 263
Brongersma, S.H., 443
Brüderl, G., 367
Brunner, O., 181
Bruynseraede, Y., 191, 651, 667
Buder, R., 587
Buekenhoudt, A., 31, 177
Bunda, V., 619
Burger, J., 129
Burin, J.P., 611, 615
Bursill, L.A., 125
Burzlaff, H., 367
Busch, R., 379

Cabanel, R., 583
Cabeza, O., 623, 627
Calestani, G., 315
Caplin, A.D., 467, 503, 703
Capponi, J.J., 81, 169
Caracino, P., 507
Cardona, M., 187
Caristan, E., 121, 211
Carrié, F., 121, 211
Cassart, M., 335
Cassidy, S.M., 503
Catana, A., 93
Catherinot, A., 207
Cavagnat, R., 133
Cernik, M., 619
Chaillout, C., 81, 169
Chaloupka, H., 559
Chambonnet, D., 239, 243
Champeaux, C., 207
Chateigner, D., 149
Cheang Wong, J.C., 137, 675
Chenevier, B., 287
Cherginets, V.L., 157
Chern, J.D., 567, 591
Chevalier, B., 335
Chew, N.G., 563, 695
Chikumoto, N., 407
Chmaissem, O., 169
Chukanova, I., 117
Clemens, H.J., 247
Cohen, L.F., 141, 467, 503
Cohen-Adad, M.Th., 47, 53, 455, 607
Cornelis, J., 31, 177
Cors, J., 303
Cornépius, S., 215, 223
Couach, M., 47, 53, 455, 547, 607
Crozat, P., 715
Cuthbert, M.N., 503

Dallacasa, V., 531
Dam, B., 427
Danesi, P., 459
Das, A., 323
de Groot, D.G., 427, 443
de Jonge, W.J.M., 15, 439
Decker, W., 291
Decroux, M., 181
Defourneau, R.M., 251
Delabouglise, G., 475
Delannay, F., 227
Deltour, R., 347
Demirskaya, O.V., 157
Depond, J.M., 121, 211
Deschanels, X., 161
Desgardin, G., 679
Desmertenne, B., 583
Devos, P., 177
Dew-Hughes, D., 567, 591
Díaz, A., 623
Díaz, D., 627
Diko, P., 619, 659
Dimesso, L., 315
Dineen, C., 507
Domarco, G., 623
Donnelly, K., 39
Dormann, J.L., 331
Dou, S.X., 503, 515
Dousselin, G., 195, 715
Douwes, H., 451
Drake, A., 23
Dreibholz, J., 575
Drulis, H., 471
Dumas, J., 587
Dumoulin, L., 527
Duperray, G., 507

Edstam, J., 711
Edwards, J.A., 695
Egdell, R.G., 535
Ehlers, G., 267
Ehmann, A., 57
Eibl, O., 215
Eisenberg, M., 231
El Azrak, A., 663
Emmen, J.H.P.M., 15, 439
Enard, J.P., 251
Epifani, M., 727
Erb, A., 431
Erokhin, Yu., 291
Esquinazi, P., 419
Etourneau, J., 335
Even, R., 491
Ewert, S., 435

Fages, C., 243
Fandel, M., 173
Feduzi, R., 531
Feigel'man, M.V., 407
Filippini, C., 543
Fink, C., 367
Fischer, K., 671
Fischer, Ø., 181, 303, 447
Fischer, P., 599
Fivat, P., 181
Flavell, W.R., 535
Fletcher, I.W., 535
Flokstra, J., 231, 707
Fontcuberta, J., 11
Forkl, A., 499
Fouad, Y., 611, 615
Fox, F., 571
Francesconi, M.G., 315
Franz, M., 61
Freeman, W.G., 507
Freyhardt, H.C., 117
Frieling, T., 7
Fries, T., 43, 57
Frit, B., 207
Fröhlich, K., 475
Fu, C.M., 191, 651
Furrer, A., 595, 599

Gaboriaud, R.J., 259
Galez, P., 603
Gallop, J.C., 703
Gaskov, A.M., 145
Gauzzi, A., 647
Geerk, J., 263
Geerkens, A., 435
Genoud, J.-Y., 351
Germi, P., 149
Gerritsma, G.J., 643, 719, 723
Gervais, F., 77
Gherardi, L., 507
Giannelli, A., 631
Giovannella, C., 631
Gloe, K., 65
Glowacki, B.A., 165, 639
Goerke, F., 219
Goldacker, W., 511
Gomis, V., 11
Goodilin, E.A., 27

Goodyear, S.W., 695
Gorbenko, O., 291
Goringe, M.J., 567, 591
Gornik, E., 355, 571
Gorochov, O., 323, 331, 359
Graboy, I., 291
Graf, T., 351
Granqvist, C.G., 343
Gray, T.J., 101
Griessen, R., 427, 443, 447
Grivei, E., 335
Groult, D., 395
Grovenor, C.R.M., 567, 591
Guillaume, M., 599
Guilloux-Viry, M., 93, 195, 339, 715
Guilloux-viry, M., 663
Guimpel, J., 667
Guldeste, A., 567, 591
Güntherodt, G., 375
Güntherodt, H.-J., 105
Güntherodt, H.-J., 97, 109, 113
Guo, Y.C., 503
Gupta, A., 419
Guyot, H., 543

Habermeier, H.-U., 187, 499
Hadfield, R., 327
Haefke, H., 97, 109, 113
Hahn, T., 191
Haidlinger, S., 173
Halbritter, J., 579
Hall, S.R., 507
Hamet, J.F., 235
Hardy, V., 395
Harris, I.R., 23, 39
Harrison, M.R., 507
Häussler, P., 299
He, X., 295
Heime, K., 295
Heinzel, Ch., 173
Hejtmanek, J., 335
Hemmes, H., 283
Hénaux, J.C., 715
Henn, R., 263
Hensen, S., 555, 559
Hergt, R., 431
Hernández-Rojas, J.L., 635
Hervieu, M., 235, 395
Hesse, D., 109, 113
Heuken, M., 295
Hiergeist, R., 431
Hilgenkamp, J.W.M., 231, 707
Hirata, K., 105, 215
Hoad, D.R.C., 535
Holzapfel, B., 411
Horyń, R., 687
Höschele, J., 173
Hosseini Teherani, F., 211
Hu, Q.Y., 515
Huber, R., 255
Hudner, J., 287
Hughes, S.E., 507
Hugot-Le Goff, A., 239
Humphreys, R.G., 563, 695
Huong, P.V., 133, 691

Iborra, E., 635
Ichikawa, M., 371
IJsselsteijn, R.P.J., 231, 707
Ilonca, G., 347
Indenbom, M.V., 499
Ishchuk, V.M., 157
Issi, J.-P., 335
Ivanov, Z.G., 343

Jackiewicz, J., 165
Jacobson, D.M., 507
Jakob, G., 191
Jeck, M., 559
Jondo, T.K., 47, 53, 455, 607
Joosse, K., 723
Jorda, J.-L., 47, 607
Jorda, J.L., 53, 455
Junod, A., 47, 351, 455, 547, 607

Kabius, B., 129
Kachlicki, T., 283
Kakihana, M., 327, 363
Kaletkin, I.O., 35
Käll, M., 363
Kamarás, K., 187
Kapitulnik, A., 491
Kaul, A., 291
Kawai, T., 133
Kazin, P.E., 27
Keene, M.N., 695
Keller, D., 239, 243
Kemmler-Sack, S., 43, 57
Kes, P.H., 451
Keßler, J., 511
Khailova, E.G., 157
Khoder, A.F., 47, 53, 547, 607
Khoder, AF., 455
Kilner, J.A., 141
Kinder, H., 105, 215, 223, 271
Kitahama, K., 133
Klamut, J., 471
Klauda, M., 367
Klaumünzer, S., 403, 411
Klein, L., 407
Klemt, E., 507
Klestov, S.A., 479
Koblischka, M.R., 483
Koeman, N.J., 443
Koller, E., 303
Komarov, A.O., 35
Konczykowski, M., 407
Kopelevich, Y., 419
Kovac, J., 659
Kowalewski, J., 7
Krabbes, G., 65, 463
Krauns, C., 203
Kraus, M., 403, 411
Kräußlich, J., 199
Krebs, H.-U., 203, 275
Kreiselmeyer, G., 411
Kreisler, A., 121, 211
Krekels, T., 307
Kronmüller, H., 483, 499
Kubo, K.-i., 371
Kummeth, P., 379, 403
Kun, A., 619
Kupfer, H., 479
Kupriyanov, M.Yu., 551

Labarta, A., 11
Labdi, S., 703
Lacour, C., 691
Lahaye, M., 133
Lancaster, M.J., 563
Lanckbeen, A., 347
Lang, E.P., 105
Lang, H.P., 97, 109, 113
Lange, R., 247
Laverty, J.R., 503
Le Nagard, N., 323
Leach, D.H., 187
Lebeau, C., 611, 615
Lebedev, O., 475
Leckel, O., 125
Lederman, D., 667
Lee, M.J., 141, 467
Lee, S.R., 27
Leghissa, M., 379
Legris, A., 415
Lejay, P., 415
Lenkens, M., 559
Lesueur, J., 527
Leysen, R., 31
Li, Z.Z., 663
Licheron, M., 77
Linker, G., 137, 263
Linzen, S., 199
Lippert, M., 555
Litvinchuk, A.P., 187
Liu, F., 503
Liu, H.K., 503, 515
Liu, R.S., 651
Loegel, B., 459
Lombardo, L., 491
Lösch, S., 43, 57
Lucía, M.L., 635
Ludwig, F., 267
Lyanda-Geller, Yu.B., 435

Maenhoudt, M., 667
Maknani, J., 331
Mancino, P., 727
Mannhart, J., 519
Marchet, P., 207
Marcus, J., 543
Marezio, M., 169
Maritato, L., 727
Markl, J., 367
Marquestaut, E., 133
Martin, C., 121
Martin, J.C., 121
Martinez, B., 11
Martinez-Garcia, D., 251
Masini, R., 315
Matas, S., 619, 659
Mateychenko, P.V., 157
Mattern, N., 65
Mattheis, F., 203, 275
Maul, M., 299
Mayca, F., 137, 675
Maza, J., 623, 627
McCormack, J.S., 507
McGreevy, R., 327
Mehbod, M., 347
Mehdaoui, A., 459
Mercandalli, L.M., 675
Mercey, B., 235
Mercurio, J.P., 207
Mesot, J., 595, 599
Metra, P., 507
Meyer, M., 575
Meyer, O., 137, 263
M'Hamdi, M., 691
Miéville, L., 303
Migliori, A., 315
Milani, E., 727
Milat, O., 307
Millet, P., 507
Minakovic, B., 567
Mokhtari, M., 339, 611
Mönch, W., 247
Monnier, F., 455
Monod, P., 583
Monot, I., 679
Mordike, B.L., 679
Moriceau, H., 243
Moshchalkov, V.V., 191, 651
Moshopoulou, E., 81
Mossang, E., 287, 475, 587
Moudden, A.H., 603
Mouritsen, O.G., 327
Moussa, F., 603
Müller, F.J., 703
Müller, G., 555, 559, 575
Müller, H.-U., 267
Muller, J., 47, 351, 455, 547, 607
Müller, J.-P., 267
Müller, K.A., 519
Muller, K.B., 507
Muñoz, J.S., 279
Musolf, J., 295
Mutka, H., 595

Nahoum, R., 663
Nemoshkalenko, V.V., 731
Neumüller, H.-W., 379, 403
Neumüller, H.W., 507, 515
Nevriva, M., 15
Nieva, G., 667
Nikitin, B.G., 731
Nilsson, P.-Å., 711
Niznansky, D., 73
Noji, H., 639
Nurnberg, A., 291

Obradors, X., 11
Oleynikov, N.N., 27
Olsson, H.K., 711
Oota, A., 639

Opagiste, C., 47, 53, 455, 547, 607
Orbach, S., 555, 559
Ortega, C., 137, 675
Os'kina, T.E., 551
Osquiguil, E., 667
Osterstock, F., 679
Östling, M., 287
Ouhammou, L., 323

Padiou, J., 195
Pan, V.M., 387
Pankowska, H., 323, 331
Parberry, J.M., 507
Paroli, P., 727
Paulus, W., 57
Pavuna, D., 647
Pech, T., 211
Pellan, Y., 195, 715
Peña, O., 339, 611
Perez-Pinaya, R., 181
Perkins, G.K., 467, 503
Pernet, M., 149
Perrière, J., 239, 251
Perrin, A., 93, 195, 339, 663, 715
Perrin, C., 339, 611
Petitbon, A., 507
Petryanik, A.A., 35
Peyral, P., 611, 615
Piel, H., 551, 555, 559, 575
Piñol, S., 11
Pomar, A., 623, 627
Ponomarev, Ya.G., 551
Pont, M., 279
Porch, A., 563
Pothuizen, J.J.M., 443
Poullain, G., 235
Poulsen, H.F., 327
Provost, J., 395
Prusseit, W., 215, 223, 271
Przyslupski, P., 141, 467
Pulver, M., 291
Putlayev, V.I., 35

Quillet, S., 527
Quincey, P., 141, 467
Quitmann, C., 375

Raboutou, A., 611, 615
Radcliffe, J., 527
Radcliffe, J.W., 141, 467
Raff, E., 43
Raffy, H., 663, 703
Rakhimov, H.T., 551
Range, K.-J., 367
Ranno, L., 239, 251
Rao, M.S.R., 323
Ratzel, F., 263
Rau, F., 367
Rauch, W., 571
Raveau, B., 235, 395
Rebrova, T.P., 157
Rector, J., 427
Régnier, P., 161
Rehspringer, J.L., 69, 73
Reiner, J., 263
Reiss, H., 507
Remmel, J., 263
Rentschler, T., 43
Reuvekamp, E.M.C.M., 643
Revenaz, S., 587
Ries, G., 379, 403
Rijnders, A.J.H.M., 707, 719
Ritschel, M., 65, 463
Roberts, A.J., 535
Robin-Brisson, C., 335
Robinet, S., 195
Rodríguez, T., 635
Roessli, B., 599
Roesthuis, F.J.G., 719
Rogalla, H., 231, 283, 643, 707, 719, 723
Rosenblatt, J., 611, 615
Rosseel, E., 191, 651
Rossel, C., 93
Rullier-Albenque, F., 415
Ruosi, A., 727
Ryelandt, L., 227

Saba, F.M., 141, 467
Sacuto, A., 137, 359, 675
Saemann-Ischenko, G., 129, 367, 379, 403, 411, 555
Salmon, E., 259
Salsi, G., 315
Sánchez-Quesada, F., 635
Santamaría, J., 635
Sargankova, I., 659
Satchell, J.S., 695
Scafuro, R., 727
Schewebach, A., 227
Schilling, M., 219
Schlenker, C., 587
Schlick, H., 559
Schlom, D.G., 519
Schmelz, M., 299
Schmidl, F., 199
Schmirgeld, L., 161
Schmitt, P., 379
Schnack, H.G., 447
Schneider, M., 255
Schneidewind, H., 199
Scholtes, R., 435
Schuller, I.K., 667
Schulte, B., 299
Schultz, L., 129, 411
Schulz, C., 43, 57
Schulz, F.I., 419
Schuster, Th., 483
Schwerdtfeger, M., 243
Seemann, R., 367
Seidel, P., 199
Seminozhenko, V.P., 157
Senateur, J.P., 287
Sénateur, J.P., 475
Sénateur, JP., 587
Sergent, M., 339
Servaes, F., 177
Sethupathi, K., 551
Shields, T.C., 101
Sibieude, F., 53
Siejka, J., 137, 675
Simon, Ch., 395
Smithers, M., 283
Smithey, R., 263
Sölkner, G., 571
Somekh, R.E., 141, 467
Souletie, B., 81
Splittgerber-Hünnekes, P., 279, 283
Srámek, J., 15
Staneff, T., 173
Staub, U., 595, 599
Steins, M., 299
Stellmach, F., 435
Stepantsov, E.A., 711
Stephan, H., 65
Stolle, R., 291
Stöver, D., 279, 283
Strasser, G., 355
Strauss, S., 679
Strelkov, S.N., 145
Strikovsky, M., 263
Ströbel, J., 519
Sudakova, M.V., 551
Sugii, N., 371
Suleimanov, N.M., 471
Sulpice, A., 81
Sum, R., 97, 109, 113
Sun, Y., 355
Sundqvist, B., 655
Suryanarayanan, R., 323, 331, 359
Svetchnikov, V., 85

Takano, S., 19
Tate, T.J., 141, 467
Tavares, P.A.C., 707
Terpstra, D., 719
Terziev, V.G., 331
Teske, K., 671
Tesker, A.M., 35
Tétard, D., 121
Theilig, Th., 173
Thivet, C., 93, 195, 339, 663, 715
Tholence, J.L., 169
Thomas, J., 463
Thomas, O., 287, 475, 587
Thomsen, C., 187
Thrane, B.P., 587
Tighezza, A., 69
Timko, M., 659
Torrón, C., 623, 627
Traeholt, C., 85
Tressaud, A., 335
Tretyakov, Yu.D., 145, 551
Trimaille, I., 137, 675
Triscone, G., 47, 303, 351, 455, 547, 607
Triscone, J.-M., 181, 303
Triscone, J.M., 447
Trofimov, I.E., 187

Urban, K., 129
Usoskin, A., 117
Utz, B., 215, 271

Vaglio, R., 727
Valenzuela, A.A., 571
van Dalen, A.J.J., 447
Van Hong, L., 363
Van Tendeloo, G., 307
Vasiliu-Doloc, L., 603
Veira, J.A., 623, 627
Verges, P., 65, 463
Verhoeven, M.A.J., 643
Verma, A.L., 133
Verweij, E., 443
Vidal, F., 623, 627
Villégier, J.C., 243
Vinokur, V.M., 407
Vittoz, C., 231
Voronkova, V.I., 479

Waffenschmidt, E., 295
Wagner, U., 255
Wahl, G., 291
Wang, K.Q., 547
Weber, H.W., 515
Wehler, D., 551, 575
Weiss, F., 287, 475
Wellhofer, F., 101
Wen, J.G., 85
Wen, Hai-Hu, 427
Weyten, H., 31, 177
Wicker, A., 507
Widder, W., 61
Wildgruber, U., 511
Willot, I., 227
Wischert, W., 57
Wolcyrz, M., 687
Wolf, E.L., 503
Wolf, S.A., 555
Wolf, Th., 575
Wuyts, B., 667

Yacoby, E.R., 407
Yamamoto, K., 371
Yamauchi, H., 19, 371
Yanmaz, E., 23, 39
Yanovsky, V.K., 479
Yeshurun, Y., 407

Zach, K., 199
Zammatio, S.J., 507
Zandbergen, H.W., 85, 643
Zavrazhnova, V.D., 157
Zentko, A., 619, 659
Zhilin, A.B., 145
Zhukov, A.A., 479
Ziemann, P., 173, 255
Zoller, P., 43, 57
Zygmunt, A., 471

Subject Index of Volume 195

Bearings of YBCO
  Low power high speed rotor (200 000 rpm) with HTSC bearings, 731
Bolometer
  Composite bolometer based on $Bi_2Sr_2CaCu_2O_{8+x}$ single crystals, 727
Buffer layers
  Deposition of buffer layers for MOCVD of $Y_1Ba_2Cu_3O_{7-z}$ on GaAs, 295

Ceramics
  Bridgman growth and enhanced critical currents in textured $YBa_2Cu_3O_7$–Y_2BaCuO_5 composites, 11
  Processing of Bi-2223 ceramics in the system BPSCCO, 43
  A new elaboration process of the superconducting $Tl_2Ba_2Cu_1O_6$ phase with T_c = 90 K, 47
  Preparation of $Ba_{0.6}K_{0.4}BiO_3$ pure superconducting powder, 73
  Characterization of high-T_c superconductors by mass spectral methods of surface analysis (LIMS, SNMS), 145
  X-ray texture analysis in YBaCuO ceramics and films, 149
  Mechanical alignment of the grains of sintered YBaCuO, 161
  Magnetic characterization of differently processed YBaCuO-ceramics, 173
  Comparison of IR-active phonons in YBCO ceramics with different carrier concentrations, 355
  The effects of Co substitutions for Cu in $YBa_2Cu_3O_{6+x}$ on the phonon Raman spectrum, 363
  Specific heat of the 90-K superconductor $Tl_2Ba_2CuO_6$ ("2201") prepared in high pressure Ar or He gas, 547
  A systematic neutron diffraction study of $RBa_2Cu_3O_7$ (R = yttrium and rare earths) high-T_c superconductors, 599
  Magnetic properties of the $Tl_2Ba_2Cu_1O_{6+\delta}$ 90 K superconductor, 607
Coevaporation
  $YBa_2Cu_3O_{7-\delta}$ films on GaAs with high critical current densities, 215
  Large area deposition of $YBa_2Cu_3O_7$ films by thermal co-evaporation, 271
  Non-linear microwave surface impedance of patterned $YBa_2Cu_3O_7$ thin films, 563
Crystal growth
  Fabrication and properties of single crystals and LPE films in some HTSC systems, 1
  Crucible free techniques in $YBa_2Cu_3O_{7-x}$-crystal growth, 7
  Possibility of striations in HTSC films caused by self-destabilization of the growth temperature, 117
  High-resolution transmission electron microscopic (HRTEM) studies of $Tl_2Ba_2CuO_{6+x}$, 125
  $YBa_2Cu_3O_{7-\delta}$ films on GaAs with high critical current densities, 215

Defects
  Defects analysis of in situ grown BiSrCaCuO thin films, 251
  Defects and the thermal conductivity of $YBa_2Cu_3O_{7-\delta}$ and $YBa_2Cu_4O_8$, 655
Devices
  Preparation and non-destructive characterization of $YBa_2Cu_3O_{7-\delta}$ films for microwave applications, 559
  $YBa_2Cu_3O_7$ devices grown by evaporation, 695
  A BSCCO(2223) thin film DC SQUID utilising natural grain boundary weak-links, 703
  Materials aspects of integrated high T_c dc-SQUID magnetometer fabrication, 707
  On-chip diagnostic of high-T_c superconductors at mm-wave frequencies, 711
  High frequency broadband characterization of metal/high T_c superconducting coplanar structures, 715
  Fabrication aspects of microwave devices, including ramp-type high-T_c Josephson junctions and log-periodic antennas, 719
  Multilayers for high-T_c superconducting electric field effect devices, 723
  Composite bolometer based on $Bi_2Sr_2CaCu_2O_{8+x}$ single crystals, 727
  Low power high speed rotor (200 000 rpm) with HTSC bearings, 731
Electric transport properties
  Grain misorientation and properties of HTSC thin films, 263
  Electric field effect in high-T_c superconductors, 519
  Granularity effects in transport properties of 123 superconducting thin films, 635
Electronic structure
  Electronic structure of pure and substituted $BaBiO_{3-\delta}$ single crystals, 543
  Crystal field, cluster formation and percolative superconductivity in $ErBa_2Cu_3O_x$, 595
  Search for characteristic lengthscales of the magnetic field distribution at the surface of superconducting $Bi_2Sr_2CaCu_2O_{8+\delta}$ single crystals, 491

Filaments
  High T_c superconducting $YBa_2Cu_3O_{7-x}$ filaments: An improved thermal treatment, 31
  Problems of obtaining highly textured HTSC coatings, 157
  Influence of the constant load sintering on the improvement of the transport critical current in Ag-$(Bi, Pb)_2Sr_2Ca_2Cu_3O_x$ tape form conductor, 165
  Enhancement of critical current density j_{cm} and pinning energy U in melt textured $Bi_2Sr_2CaCu_2O_{8+\delta}$ on Ag-tape by heavy ion irradiation, 403
  High critical currents in Ag-BSCCO(2223) tapes: Are the grain boundaries really 'weak-links'?, 503
  High temperature superconductors for power cables, 507
  High critical currents in Bi(2223) tapes with Ag and hardened Ag sheaths, 511
  The relation between crossover of the intergrain loss-peak temperature-field characteristics of the Ag–$Bi_2Sr_2CaCu_2O_x$ screen-printed tapes and their J_c values, 639
  Investigation of oxygen exchange of Y–Ba–Cu–O powders and AgPd sheathed tapes, 671
  Growth and optical study of superconducting superlattices, 187
  Comparison of IR-active phonons in YBCO ceramics with different carrier concentrations, 355
Floating-zone technique
  Growth of Bi–(Sr, La)–Cu–O single crystals with the floating-zone technique, 15
Fluorination
  New synthesis method of superconducting $Nd_2CuO_{4-x}F_x$, $Pr_2CuO_{4-x}F_x$, 69

Influence of fluorination on the transport properties of $La_{1.85-y}Sr_{0.15}Nd_yCuO_4$ near the low-temperature structural transition, 335
Fluorination of an epitaxial YBaCuO thin film with controlled oxygen vacancies, 339

Gallium
"Superconductor-ization" of $GaSr_2YCu_2O_7$, 19
Electrical resistivity of $PrBa_2Cu_{3-x}Ga_xO_{7-y}$ (001) and (105) oriented thin films, 643

Hall measurements
Superconducting and normal-state transport properties in bulk YBaCuO, doped with Zn, 347
Influence of pinning by columnar defects on the longitudinal and Hall resistivities of $YBa_2Cu_3O_7$ single crystals in the mixed state, 415
Nanostructural characterization of interfaces of thin films of $YBa_2Cu_3O_7$ with various kinds of substrates, 85
Microstructures and precipitates in laser-ablated YBCO thin films on $SrTiO_3$ (110), 93
High-resolution transmission electron microscopic (HRTEM) studies of $Tl_2Ba_2CuO_{6+x}$, 125
Columnar defects induced by high energy heavy ions in HTSC. Their effect on irreversibility line and pinning properties, 395

Irradiation
Ion-beam induced metal insulator transition in YBCO films, 527
The influence of gamma irradiation on superconductivity of $YBa_2CU_3O_{7-x}$, 659

Josephson junctions
$YBa_2Cu_3O_7$ devices grown by evaporation, 695
On-chip diagnostic of high-T_c superconductors at mm-wave frequencies, 711
Fabrication aspects of microwave devices, including ramp-type high-T_c Josephson junctions and log-periodic antennas, 719

Laser ablation
Microstructures and precipitates in laser-ablated YBCO thin films on $SrTiO_3$ (110), 93
Thin films of (RE)$Ba_2Cu_3O_7$ in-situ epitaxially grown by laser ablation: Crystalline structure, resistivity and critical exponents of temperature dependent critical currents, 195
Laser ablated YBCO thin films – relations between structural and electrical properties, 199
Bi-epitaxial template grain boundaries with different in-plane angles on (100) MgO substrates, 231
$\vec{a}$-axis laser ablated superconducting YBCO thin films. Growth mechanism on MgO substrate, 235
Structural defects in YBaCuO thin films grown on MgO substrates, 239
Defects analysis of in situ grown BiSrCaCuO thin films, 251
Conditions for the textured growth of Y–Ba–Cu–O films on Zr foils, 275
Fluorination of an epitaxial YBaCuO thin film with controlled oxygen vacancies, 339
Laser deposition
Oxygen diffusion in laser deposited YBaCuO thin films, 203
Pulsed laser deposition of $YBa_2Cu_3O_{7-x}$ superconducting thin films: Correlation between preparation conditions and structural and electrical properties, 207
Buffer layers of yttria stabilized zirconia for $YBa_2Cu_3O_7$ devices on silicon substrates, 219
Optimization of YBCO thin films grown on MgO for microwave applications, 243
Superconducting properties of electrochemically Li^+ intercalated $Y_1Ba_2Cu_3O_{7-\delta}$ thin films, 343
Synthesis and characterization of "infinite layer" compounds doped with p-type carriers, 371
Liquid-phase epitaxy
Fabrication and properties of single crystals and LPE films in some HTSC systems, 1

Magnetic behaviour
Enhancement of critical current density j_{cm} and pinning energy U in melt textured $Bi_2Sr_2CaCu_2O_{8+\delta}$ on Ag-tape by heavy ion irradiation, 403
Time dependence of the magnetization in $Bi_2Sr_2CaCu_2O_{8+z}$, 439
Magnetic properties of the $Tl_2Ba_2Cu_1O_{6+\delta}$ 90 K superconductor, 607
Disorder and non-linear magnetic response of high T_c superconductors, 611
A model for low-field flux penetration in disordered superconductors, 615
The preparation and magnetic properties of the high T_c superconductor (2234) $Bi_{1.6}Pb_{0.4}Sr_2Ca_3Cu_4O_{12+y}$, 619
Which kind of disorder most influences the magnetic properties of high-T_c superconductors?, 631
Magneto-optics
Magneto-optical imaging of Shubnikov phase, 483
Characterization of superconductors using magnetooptic techniques, 499
Magnetoresistance
Effect of dimensional crossover on magnetoresistance of $YBa_2Cu_3O_7/PrBa_2Cu_3O_7$ superlattices, 191
Magnetoresistance and conductivity fluctuations in $(Tl_{0.5}Pb_{0.5})Sr_2(Ca_{1-x}Y_x)Cu_2O_7$ superconductors, 651
Mechanical properties
Toughness and thermoshock resistance of polycrystalline $YBa_2Cu_3O_{7-\delta}$, 679
Melt growth
Bridgman growth and enhanced critical currents in textured $YBa_2Cu_3O_7$–Y_2BaCuO_5 composites, 11
Melt processing of powdered arc-cast $YBa_2Cu_3O_y$ materials, 23
A modified QMG method of high T_c YBCO preparation, 27
Synthesis of Bi-based high temperature superconductors using melt technologies, 35
Characterisation of Bi–Pb–Sr–Ca–Cu–O rods subject to direct current zoning (DCZ) and direct current annealing (DCA), 39
Peak-effect, scaling behavior and voltage–current characteristics for $TmBa_2Cu_3O_{7-\delta}$ single crystal, 479
The preparation and magnetic properties of the high T_c superconductor (2234) $Bi_{1.6}Pb_{0.4}Sr_2Ca_3Cu_4O_{12+y}$, 619
The relation between crossover of the intergrain loss-peak temperature-field characteristics of the Ag–$Bi_2Sr_2CaCu_2O_x$ screen-printed tapes and their J_c values, 639
Metal–insulator transition
Ion-beam induced metal insulator transition in YBCO films, 527
Microstructure
Melt processing of powdered arc-cast $YBa_2Cu_3O_y$ materials, 23
Characterisation of Bi–Pb–Sr–Ca–Cu–O rods subject to direct current zoning (DCZ) and direct current annealing (DCA), 39
Evolution of structure and superconductivity with lithium content in $Li_{1-x}Ti_2O_4$, 81
Nanostructural characterization of interfaces of thin films of $YBa_2Cu_3O_7$ with various kinds of substrates, 85
Microstructures and precipitates in laser-ablated YBCO thin films on $SrTiO_3$ (110), 93
Surface morphology of $YBa_2Cu_3O_{7-\delta}$ thin films on $SrTiO_3$(100) studied by scanning tunneling microscopy, 97

Microstructural studies of non-stoichiometric YBCO thick films processed on YSZ substrates, 101
Scanning tunneling microscopy study on $YBa_2Cu_3O_{7-x}$ films with growth stop by observing reflection high-energy electron diffraction oscillations, 105
Bulk and surface structure of epitaxial $YBa_2Cu_3O_{7-\delta}$ thin films grown on Mg_2TiO_4 (001) substrate layers. : I: Bulk structure investigated by TEM, 109
Bulk and surface structure of epitaxial $YBa_2Cu_3O_{7-\delta}$ thin films grown on Mg_2TiO_4 (001) substrate layers. : II: Orientation and surface structure, 113
Microstructure investigations of the epitaxial growth of ultrathin $Bi_2Sr_2CaCu_2O_x$ superconducting films on (00i) $SrTiO_3$ substrates, 129
Microstructure of Bi_{2212} and $(Bi/Pb)_{2212}$ single crystals and effect of electron donors and acceptors, 133
Selective ^{18}O labelling in *a*-axis oriented YBaCuO thin films, 137
SIMS study of low energy $^2H^+$ ion-implanted $YBa_2Cu_3O_{7-\delta}$ thin films, 141
Structural analysis of the charge transfer mechanism in the superconducting compounds $Pb_2Sr_2Y_{1-x}Ca_xCu_3O_{8+\delta}$, 169
Thin films of $(RE)Ba_2Cu_3O_7$ in-situ epitaxially grown by laser ablation: Crystalline structure, resistivity and critical exponents of temperature dependent critical currents, 195
Oxygen diffusion in laser deposited YBaCuO thin films, 203
Crack formation in $YBa_2Cu_3O_{7-\delta}$ films on silicon, 223
Reactive growth of $YBa_2Cu_3O_{7-x}$ layers on Y_2BaCuO_5 substrates, 227
Bi-epitaxial template grain boundaries with different in-plane angles on (100) MgO substrates, 231
Optimization of YBCO thin films grown on MgO for microwave applications, 243
Surface and interface properties of cleaned and Ag-covered $YBa_2Cu_3O_{7-x}$ films, 247
Preparation and room temperature ion irradiation of sputtered YBaCuO-films, 255
Grain misorientation and properties of HTSC thin films, 263
Growth and properties of MOCVD $YBa_2Cu_3O_{7-x}$ thin films, 287
Structural effects of element substitution on superconducting properties in 1-2-3 YBCO: An electron microscopy study, 307
Effects of simultaneous Pb/Bi and Y/Ca substitution on structural and superconducting properties of the 2212 BSCCO phase, 315
Structure and superconductivity in Co doped $YBa_2Cu_3O_{6+x}$, 327
Critical currents in real HTSC materials, 387
A systematic neutron diffraction study of $RBa_2Cu_3O_7$ (R = yttrium and rare earths) high-T_c superconductors, 599
Influence of the granularity on the thermoelectric power of polycrystalline $Bi_{1.5}Pb_{0.5}Sr_2Ca_2Cu_3O_y$ superconductors, 623
Influence of the polycrystallinity on the paraconductivity in copperoxide superconductors, 627
Which kind of disorder most influences the magnetic properties of high-T_c superconductors?, 631
Granularity effects in transport properties of 123 superconducting thin films, 635
Study of oxygen content and of disorder in YBaCuO thin films with enlarged *c*-axis lattice parameter, 675
Toughness and thermoshock resistance of polycrystalline $YBa_2Cu_3O_{7-\delta}$, 679
Mechanochemical effects of grinding on the $YBa_2Cu_3O_{7-\delta}$ superconductor, 683
Structure and Raman spectrum of $BiSr_2CaCu_2O_7$ (Bi_{1212}) superconductor, 691

Microwave properties
Non-bolometric microwave response of a granular Bi(Pb)SrCaCuO thin film, 567
Microwave properties of structured $YBa_2Cu_3O_{7-x}$ thin films, 571
Surface resistance of large $YBa_2Cu_3O_{7-x}$ crystals at 3 GHz with residual losses caused by flux compounds, 575
Weak link effects in the surface impedance of cuprate superconductors, 579
Low field microwave absorption study of defects in $YBa_2Cu_3O_7$ crystals and films, 583
Comparative study of the irreversibility line and of harmonic generation in field modulated microwave absorption on $YBa_2Cu_3O_7$ thin films, 587
Preparation of 110 K Bi(Pb)SrCaCuO superconducting thin films by r.f. magnetron sputtering and their response to microwave radiation, 591
Growth and properties of MOCVD $YBa_2Cu_3O_{7-x}$ thin films, 287
Low-pressure single aerosol source MOCVD of YBCO thin films, 291
Deposition of buffer layers for MOCVD of $Y_1Ba_2Cu_3O_{7-x}$ on GaAs, 295
Compositional effects in $Y_xBa_yCu_xO_{7-\delta}$ thin films prepared by metalorganic chemical vapour deposition, 299
Transport critical current in MOCVD $YBa_2Cu_3O_7$ thin films using a pulse technique, 475
Comparative study of the irreversibility line and of harmonic generation in field modulated microwave absorption on $YBa_2Cu_3O_7$ thin films, 587

Monte Carlo
SIMS study of low energy $^2H^+$ ion-implanted $YBa_2Cu_3O_{7-\delta}$ thin films, 141
Structure and superconductivity in Co doped $YBa_2Cu_3O_{6+x}$, 327

Mössbauer spectroscopy
No evidence of Fe transfer between Cu1 and Cu2 sites in $YBa_2(Cu_{1-x}Fe_x)_3O_{7-d}$ ($0.02 \leqslant x \leqslant 0.04$) annealed in an inert atmosphere, 331

Paraconductivity
Non-universal behaviour of paraconductivity in $YBa_2Cu_3O_{7-\delta}$ films, 647

Phase equilibria
Phase equilibria in the binary $TlO_{1.5}$–CuO, $TlO_{1.5}$–BaO and ternary $TlO_{1.5}$–BaO–CuO systems, 53

Phase transitions
Pressure effects on the structural phase transitions in $La_{2-x}Ba_xCuO_4$, 603

Photoconductivity
Optical conductivity and carrier relaxation rate in the normal state of high T_c thin films, 663
Photoexcitation effects in $YBa_2Cu_3O_x$, 667

Pinning
Structural effects of element substitution on superconducting properties in 1-2-3 YBCO: An electron microscopy study, 307
Pinning energy in HTSC and its influence on electric and magnetic properties, 379
Critical currents in real HTSC materials, 387
Columnar defects induced by high energy heavy ions in HTSC. Their effect on irreversibility line and pinning properties, 395
Enhancement of critical current density j_{cm} and pinning energy U in melt textured $Bi_2Sr_2CaCu_2O_{8+\delta}$ on Ag-tape by heavy ion irradiation, 403
Flux pinning by columnar defects in high-temperature superconducting crystals, 407
Effect of columnar defects on the critical current anisotropy of epitaxial $YBa_2Cu_3O_{7-\delta}$ thin films and $YBa_2Cu_3O_{7-\delta}/PrBa_2Cu_3O_{7-\delta}$ multilayers, 411
Influence of pinning by columnar defects on the longitudinal and Hall resistivities of $YBa_2Cu_3O_7$ single crystals in the mixed state, 415

Vibrating reed studies of vortex pinning in high temperature superconductors, 419
Thermally activated flux motion and quantum creep in $YBa_2Cu_3O_7$ and $Y_2Ba_4Cu_8O_{16}$ films, 427
Angular dependence of creep in YBCO single crystals investigated by torque magnetometry, 431
Angular dependence of magnetoresistance and critical current density of sputtered $YBa_2Cu_3O_{7-\delta}$ films, 435
Time dependence of the magnetization in $Bi_2Sr_2CaCu_2O_{8+x}$, 439
Multiple maxima in the field dependent magnetisation of superconducting Nb/Cu multilayers, 443
Experimental observation of quantum creep in high-T_c superconducting YBCO–PrBCO superlattices, 447
Vortex-activation energy and critical currents of $Y_1Ba_2Cu_3O_{7-\delta}$ thin films containing screw dislocations, 451
Reversibility of the mixed state of the 90 K $Tl_2Ba_2CuO_{6+x}$ superconductor, 455
Irreversibility and critical lines in textured high temperature superconductors: Effects of processing on the magnetic phase diagram, 459
Magnetization and critical currents in nonstoichiometric $YBa_2Cu_3O_{7-\delta}$ of different structural order, 463
VSM measurements of critical currents for $^2H^+$ and $^{16}O^+$ low energy ion implanted $YBa_2Cu_3O_{7-x}$ thin films, 467
Critical magnetization currents in a hydrogenated $La_{1.85}Sr_{0.15}CuO_4$ superconductor, 471
Transport critical current in MOCVD $YBa_2Cu_3O_7$ thin films using a pulse technique, 475
Peak-effect, scaling behavior and voltage–current characteristics for $TmBa_2Cu_3O_{7-\delta}$ single crystal, 479
Magneto-optical imaging of Shubnikov phase, 483
Search for characteristic lengthscales of the magnetic field distribution at the surface of superconducting $Bi_2Sr_2CaCu_2O_{8+\delta}$ single crystals, 491
Characterization of superconductors using magnetooptic techniques, 499
High critical currents in Ag-BSCCO(2223) tapes: Are the grain boundaries really 'weak-links'?, 503
High temperature superconductors for power cables, 507
High critical currents in Bi(2223) tapes with Ag and hardened Ag sheaths, 511
Two dimensional behavior and critical current anisotropy in $(Bi, Pb)_2Sr_2Ca_2Cu_3O_{10+x}$ tapes, 515

Plasma spraying
Bi–Sr–Ca–Cu–O superconducting thick films deposited onto metallic substrates by plasma spraying, 279
Superconductive and structural properties of plasma sprayed YBaCuO and BiSrCaCuO layers, 283

Raman spectra
Microstructure of Bi_{2212} and $(Bi/Pb)_{2212}$ single crystals and effect of electron donors and acceptors, 133
Growth and optical study of superconducting superlattices, 187
Structural defects in YBaCuO thin films grown on MgO substrates, 239
The effects of Co substitutions for Cu in $YBa_2Cu_3O_{6+x}$ on the phonon Raman spectrum, 363
Structure and Raman spectrum of $BiSr_2CaCu_2O_7$ (Bi_{1212}) superconductor, 691

Rare earths
Thin films of $(RE)Ba_2Cu_3O_7$ in-situ epitaxially grown by laser ablation: Crystalline structure, resistivity and critical exponents of temperature dependent critical currents, 195
Structural effects of element substitution on superconducting properties in 1-2-3 YBCO: An electron microscopy study, 307
Anderson-like insulator–metal transition in rare earth doped $Bi_2Sr_2(Ca_xRE_{1-x})Cu_2O_{8+y}$, 375
A systematic neutron diffraction study of $RBa_2Cu_3O_7$ (R = yttrium and rare earths) high-T_c superconductors, 599

Resistivity measurements
The localized character of the "metallic" state in high T_c superconductors, 531
Influence of the polycrystallinity on the paraconductivity in copperoxide superconductors, 627
Electrical resistivity of $PrBa_2Cu_{3-x}Ga_xO_{7-y}$ (001) and (105) oriented thin films, 643
Photoexcitation effects in $YBa_2Cu_3O_x$, 667
Study of oxygen content and of disorder in YBaCuO thin films with enlarged c-axis lattice parameter, 675
Scanning tunneling microscopy study on $YBa_2Cu_3O_{7-x}$ films with growth stop by observing reflection high-energy electron diffraction oscillations, 105

Rutherford backscattering spectrometry
Selective ^{18}O labelling in a-axis oriented YBaCuO thin films, 137
Laser ablated YBCO thin films – relations between structural and electrical properties, 199
Structural defects in YBaCuO thin films grown on MgO substrates, 239
YBaCuO thin films deposited by ion beam sputtering assisted by implantation of: O, Ne, Ar, Cu, Kr, Xe and Ba, 259

SEM
Bulk and surface structure of epitaxial $YBa_2Cu_3O_{7-\delta}$ thin films grown on Mg_2TiO_4 (001) substrate layers. : II: Orientation and surface structure, 113
Laser ablated YBCO thin films – relations between structural and electrical properties, 199

SIMS
SIMS study of low energy $^2H^+$ ion-implanted $YBa_2Cu_3O_{7-\delta}$ thin films, 141

Sintering
The occurrence of 1212-type phase in the Pb–Sb–Sr–Ca–Y–Cu–O system, 61
Mechanical alignment of the grains of sintered YBaCuO, 161
Influence of the constant load sintering on the improvement of the transport critical current in Ag-$(Bi, Pb)_2Sr_2Ca_2Cu_3O_x$ tape form conductor, 165
Preparation, structural and magnetic properties of electron-doped infinite-layer HTSC $Sr_{1-x}Nd_xCuO_{2-\delta}$, 367
Defects and the thermal conductivity of $YBa_2Cu_3O_{7-\delta}$ and $YBa_2Cu_4O_8$, 655
Toughness and thermoshock resistance of polycrystalline $YBa_2Cu_3O_{7-\delta}$, 679

Solid state reaction
Synthesis of $YBa_2Cu_4O_8$ at $1*10^5$ Pa oxygen pressure, 65
On the crystallochemistry and superconductivity of the $(Bi_{1\pm x}Cu_{1\pm x})_8Sr_6Ca_6Cu_9O_{24+x}$, 687

Solid/gas reaction
Disorder and non-linear magnetic response of high T_c superconductors, 611

Solid/liquid reaction
Reactive growth of $YBa_2Cu_3O_{7-x}$ layers on Y_2BaCuO_5 substrates, 227

Specific heat
Specific heat of the 90-K superconductor $Tl_2Ba_2CuO_6$ ("2201") prepared in high pressure Ar or He gas, 547

Spectrometry
Characterization of high-T_c superconductors by mass spectral methods of surface analysis (LIMS, SNMS), 145

Spectroscopy
Surface and interface properties of cleaned and Ag-covered $YBa_2Cu_3O_{7-x}$ films, 247
Tunneling spectroscopy of Bi(Pb)–Sr–Ca–Cu–O superconductors, 551
Sputtering
Theoretical model of heat exchanges during the rapid thermal annealing of YBaCuO thin films, 121
In situ resistance measurements of YBaCuO thin films during the oxygenation process for various elaboration conditions, 211
Preparation and room temperature ion irradiation of sputtered YBaCuO-films, 255
YBaCuO thin films deposited by ion beam sputtering assisted by implantation of: O, Ne, Ar, Cu, Kr, Xe and Ba, 259
Large area deposition of YBaCuO thin films by means of hollow cathode sputtering, 267
Growth of $SrCuO_2$ epitaxial thin films, 303
Angular dependence of magnetoresistance and critical current density of sputtered $YBa_2Cu_3O_{7-\delta}$ films, 435
Effect of oxygen deficiency and disorder on microwave losses of epitaxially grown $YBa_2Cu_3O_{7-\delta}$ films, 555
Preparation and non-destructive characterization of $YBa_2Cu_3O_{7-\delta}$ films for microwave applications, 559
Non-bolometric microwave response of a granular Bi(Pb)SrCaCuO thin film, 567
Microwave properties of structured $YBa_2Cu_3O_{7-x}$ thin films, 571
Preparation of 110 K Bi(Pb)SrCaCuO superconducting thin films by r.f. magnetron sputtering and their response to microwave radiation, 591
Granularity effects in transport properties of 123 superconducting thin films, 635
Electrical resistivity of $PrBa_2Cu_{3-x}Ga_xO_{7-y}$ (001) and (105) oriented thin films, 643
Study of oxygen content and of disorder in YBaCuO thin films with enlarged c-axis lattice parameter, 675
High frequency broadband characterization of metal/high T_c superconducting coplanar structures, 715
Bridgman growth and enhanced critical currents in textured $YBa_2Cu_3O_7$–Y_2BaCuO_5 composites, 11
AC susceptibility measurements: A quality test for high T_c superconducting bulk materials, 177
Reversibility of the mixed state of the 90 K $Tl_2Ba_2CuO_{6+x}$ superconductor, 455
$YBa_2Cu_3O_7$ devices grown by evaporation, 695
A BSCCO(2223) thin film DC SQUID utilising natural grain boundary weak-links, 703
Materials aspects of integrated high T_c dc-SQUID magnetometer fabrication, 707
STM
Microstructures and precipitates in laser-ablated YBCO thin films on $SrTiO_3$ (110), 93
Surface morphology of $YBa_2Cu_3O_{7-\delta}$ thin films on $SrTiO_3$(100) studied by scanning tunneling microscopy, 97
Scanning tunneling microscopy study on $YBa_2Cu_3O_{7-x}$ films with growth stop by observing reflection high-energy electron diffraction oscillations, 105
Bulk and surface structure of epitaxial $YBa_2Cu_3O_{7-\delta}$ thin films grown on Mg_2TiO_4 (001) substrate layers. : II: Orientation and surface structure, 113
Substitution/doping
"Superconductor-ization" of $GaSr_2YCu_2O_7$, 19
High-resolution transmission electron microscopic (HRTEM) studies of $Tl_2Ba_2CuO_{6\pm x}$, 125
Structural analysis of the charge transfer mechanism in the superconducting compounds $Pb_2Sr_2Y_{1-x}Ca_xCu_3O_{8+\delta}$, 169
Structural effects of element substitution on superconducting properties in 1-2-3 YBCO: An electron microscopy study, 307
Effects of simultaneous Pb/Bi and Y/Ca substitution on structural and superconducting properties of the 2212 BSCCO phase, 315
Bond valence sum, hole density and irreversibility line in Ca substituted $YSrBaCu_{3-y}M_yO_{6+z}$ (M=Al, Fe, Co), 323
Structure and superconductivity in Co doped $YBa_2Cu_3O_{6+x}$, 327
No evidence of Fe transfer between Cu1 and Cu2 sites in $YBa_2(Cu_{1-x}Fe_x)_3O_{7-d}$ ($0.02 \leqslant x \leqslant 0.04$) annealed in an inert atmosphere, 331
Influence of fluorination on the transport properties of $La_{1.85-y}Sr_{0.15}Nd_yCuO_4$ near the low-temperature structural transition, 335
Fluorination of an epitaxial YBaCuO thin film with controlled oxygen vacancies, 339
Superconducting properties of electrochemically Li^+ intercalated $Y_1Ba_2Cu_3O_{7-\delta}$ thin films, 343
Superconducting and normal-state transport properties in bulk YBaCuO, doped with Zn, 347
Normal-state susceptibility versus oxygen content in the $YBa_2Cu_3O_x$ and $Y_2Ba_4Cu_7O_y$ superconducting phases, 351
Comparison of IR-active phonons in YBCO ceramics with different carrier concentrations, 355
Raman scattering on $YBa_2Cu_3O_{7-\delta}$ single crystals with variable oxygen content, 359
The effects of Co substitutions for Cu in $YBa_2Cu_3O_{6+x}$ on the phonon Raman spectrum, 363
Preparation, structural and magnetic properties of electron-doped infinite-layer HTSC $Sr_{1-x}Nd_xCuO_{2-\delta}$, 367
Synthesis and characterization of "infinite layer" compounds doped with p-type carriers, 371
Anderson-like insulator–metal transition in rare earth doped $Bi_2Sr_2(Ca_xRE_{1-x})Cu_2O_{8+y}$, 375
VSM measurements of critical currents for $^2H^+$ and $^{16}O^+$ low energy ion implanted $YBa_2Cu_3O_{7-x}$ thin films, 467
Electronic structure of pure and substituted $BaBiO_{3-\delta}$ single crystals, 543
Magnetoresistance and conductivity fluctuations in $(Tl_{0.5}Pb_{0.5})Sr_2(Ca_{1-x}Y_x)Cu_2O_7$ superconductors, 651
Superconductors for high-power applications
High temperature superconductors for power cables, 507
Superlattices
Superconducting properties of ultrathin Y(Dy)$Ba_2Cu_3O_7$ layers in Y(Dy)$Ba_2Cu_3O_7$–$PrBa_2Cu_3O_7$ heterostructures, 181
Growth and optical study of superconducting superlattices, 187
Effect of dimensional crossover on magnetoresistance of $YBa_2Cu_3O_7$/$PrBa_2Cu_3O_7$ superlattices, 191
Buffer layers of yttria stabilized zirconia for $YBa_2Cu_3O_7$ devices on silicon substrates, 219
Tunneling spectroscopy of Bi(Pb)–Sr–Ca–Cu–O superconductors, 551
Surface properties
Surface stability of superconducting oxides, 535
Electronic structure of pure and substituted $BaBiO_{3-\delta}$ single crystals, 543
Effect of oxygen deficiency and disorder on microwave losses of epitaxially grown $YBa_2Cu_3O_{7-\delta}$ films, 555
Non-linear microwave surface impedance of patterned $YBa_2Cu_3O_7$ thin films, 563
Microwave properties of structured $YBa_2Cu_3O_{7-x}$ thin films, 571
Surface resistance of large $YBa_2Cu_3O_{7-x}$ crystals at 3 GHz with residual losses caused by flux compounds, 575
Weak link effects in the surface impedance of cuprate superconductors, 579

Susceptibility measurements
Preparation of $Ba_{0.6}K_{0.4}BiO_3$ pure superconducting powder, 73
Enhancement of T_c in 2D $(Ba, K)_2(Pb, Bi)O_4$ with respect to 3D $Ba(Pb, Bi)O_3$, 77
Magnetic characterization of differently processed YBaCuO-ceramics, 173
AC susceptibility measurements: A quality test for high T_c superconducting bulk materials, 177
Growth and properties of MOCVD $YBa_2Cu_3O_{7-x}$ thin films, 287
Bond valence sum, hole density and irreversibility line in Ca substituted $YSrBaCu_{3-y}M_yO_{6+z}$ (M=Al, Fe, Co), 323
Structure and superconductivity in Co doped $YBa_2Cu_3O_{6+x}$, 327
Reversibility of the mixed state of the 90 K $Tl_2Ba_2CuO_{6+x}$ superconductor, 455
Irreversibility and critical lines in textured high temperature superconductors: Effects of processing on the magnetic phase diagram, 459
Magnetization and critical currents in nonstoichiometric $YBa_2Cu_3O_{7-\delta}$ of different structural order, 463
The relation between crossover of the intergrain loss-peak temperature-field characteristics of the Ag–$Bi_2Sr_2CaCu_2O_x$ screen-printed tapes and their J_c values, 639

TEM
Synthesis of Bi-based high temperature superconductors using melt technologies, 35
Bulk and surface structure of epitaxial $YBa_2Cu_3O_{7-\delta}$ thin films grown on Mg_2TiO_4 (001) substrate layers. : I: Bulk structure investigated by TEM, 109
Microstructure investigations of the epitaxial growth of ultrathin $Bi_2Sr_2CaCu_2O_x$ superconducting films on (001) $SrTiO_3$ substrates, 129
$\vec{a}$-axis laser ablated superconducting YBCO thin films. Growth mechanism on MgO substrate, 235
Compositional effects in $Y_xBa_yCu_zO_{7-\delta}$ thin films prepared by metalorganic chemical vapour deposition, 299
Structural effects of element substitution on superconducting properties in 1-2-3 YBCO: An electron microscopy study, 307
Magnetization and critical currents in nonstoichiometric $YBa_2Cu_3O_{7-\delta}$ of different structural order, 463
Thermal conductivity
Defects and the thermal conductivity of $YBa_2Cu_3O_{7-\delta}$ and $YBa_2Cu_4O_8$, 655
Thermal treatment
"Superconductor-ization" of $GaSr_2YCu_2O_7$, 19
High T_c superconducting $YBa_2Cu_3O_{7-x}$ filaments: An improved thermal treatment, 31
Characterisation of Bi–Pb–Sr–Ca–Cu–O rods subject to direct current zoning (DCZ) and direct current annealing (DCA), 39
Bi cuprates of type 1212 – a new family of superconductors in the Bi series, 57
Preparation of $Ba_{0.6}K_{0.4}BiO_3$ pure superconducting powder, 73
Theoretical model of heat exchanges during the rapid thermal annealing of YBaCuO thin films, 121
Selective ^{18}O labelling in a-axis oriented YBaCuO thin films, 137
SIMS study of low energy $^2H^+$ ion-implanted $YBa_2Cu_3O_{7-\delta}$ thin films, 141
In situ resistance measurements of YBaCuO thin films during the oxygenation process for various elaboration conditions, 211
Superconductive and structural properties of plasma sprayed YBaCuO and BiSrCaCuO layers, 283
No evidence of Fe transfer between Cu1 and Cu2 sites in $YBa_2(Cu_{1-x}Fe_x)_3O_{7-d}$ ($0.02 \leqslant x \leqslant 0.04$) annealed in an inert atmosphere, 331
Normal-state susceptibility versus oxygen content in the $YBa_2Cu_3O_x$ and $Y_2Ba_4Cu_7O_y$ superconducting phases, 351
Effect of oxygen deficiency and disorder on microwave losses of epitaxially grown $YBa_2Cu_3O_{7-\delta}$ films, 555
Preparation of 110 K Bi(Pb)SrCaCuO superconducting thin films by r.f. magnetron sputtering and their response to microwave radiation, 591
Investigation of oxygen exchange of Y–Ba–Cu–O powders and AgPd sheathed tapes, 671
Thermoelectric power
Influence of the granularity on the thermoelectric power of polycrystalline $Bi_{1.5}Pb_{0.5}Sr_2Ca_2Cu_3O_y$ superconductors, 623
Torque magnetometry
Angular dependence of creep in YBCO single crystals investigated by torque magnetometry, 431
Angular dependence of magnetoresistance and critical current density of sputtered $YBa_2Cu_3O_{7-\delta}$ films, 435
Multiple maxima in the field dependent magnetisation of superconducting Nb/Cu multilayers, 443
Experimental observation of quantum creep in high-T_c superconducting YBCO–PrBCO superlattices, 447
Vortex-activation energy and critical currents of $Y_1Ba_2Cu_3O_{7-\delta}$ thin films containing screw dislocations, 451

VSM
VSM measurements of critical currents for $^2H^+$ and $^{16}O^+$ low energy ion implanted $YBa_2Cu_3O_{7-x}$ thin films, 467
Peak-effect, scaling behavior and voltage–current characteristics for $TmBa_2Cu_3O_{7-\delta}$ single crystal, 479
Comparative study of the irreversibility line and of harmonic generation in field modulated microwave absorption on $YBa_2Cu_3O_7$ thin films, 587

X-ray diffraction
New synthesis method of superconducting $Nd_2CuO_{4-x}F_x$, $Pr_2CuO_{4-x}F_x$, 69
Preparation of $Ba_{0.6}K_{0.4}BiO_3$ pure superconducting powder, 73
Microstructural studies of non-stoichiometric YBCO thick films processed on YSZ substrates, 101
X-ray texture analysis in YBaCuO ceramics and films, 149
Structural analysis of the charge transfer mechanism in the superconducting compounds $Pb_2Sr_2Y_{1-x}Ca_xCu_3O_{8+\delta}$, 169
Laser ablated YBCO thin films – relations between structural and electrical properties, 199
Pulsed laser deposition of $YBa_2Cu_3O_{7-x}$ superconducting thin films: Correlation between preparation conditions and structural and electrical properties, 207
Bi-epitaxial template grain boundaries with different in-plane angles on (100) MgO substrates, 231
Structural defects in YBaCuO thin films grown on MgO substrates, 239
YBaCuO thin films deposited by ion beam sputtering assisted by implantation of: O, Ne, Ar, Cu, Kr, Xe and Ba, 259
Conditions for the textured growth of Y–Ba–Cu–O films on Zr foils, 275
Bi–Sr–Ca–Cu–O superconducting thick films deposited onto metallic substrates by plasma spraying, 279
Compositional effects in $Y_xBa_yCu_zO_{7-\delta}$ thin films prepared by metalorganic chemical vapour deposition, 299
Growth of $SrCuO_2$ epitaxial thin films, 303
No evidence of Fe transfer between Cu1 and Cu2 sites in $YBa_2(Cu_{1-x}Fe_x)_3O_{7-d}$ ($0.02 \leqslant x \leqslant 0.04$) annealed in an inert atmosphere, 331
Synthesis and characterization of "infinite layer" compounds doped with p-type carriers, 371
Mechanochemical effects of grinding on the $YBa_2Cu_3O_{7-\delta}$ superconductor, 683